May 14, 2004

City of Columbia P.O. Box N Columbia, MO 65202

Dear Permittee:

State Operating Permit No. MO0112640 originally issued on April 18, 2003, is hereby modified as per the enclosed. This modification is to correct a typographical error. The attached permit is for your official record.

Please read your permit and attached Standard Conditions. They contain important information on monitoring requirements, effluent limitations, sampling frequencies and reporting requirements.

This modification does not affect any monitoring or analysis of the effluent that may be necessary to comply with other requirements of your permit or other state regulations and does not in any way relieve you of your obligations to achieve the final effluent limitations as provided in the permit.

This permit is both your federal discharge permit and your new state operating permit and replaces all previous state operating permits for this facility. In all future correspondence regarding this facility, please refer to your state operating permit number and facility name as shown on page one of the permit.

If you have any questions concerning this permit, please do not hesitate to call this office at (573) 751-1300 or our Northeast Regional Office, 1709 Prospect Drive, Suite A, Macon, MO 63552-2602.

Sincerely,

WATER PROTECTION PROGRAM

Peter Goode, P.E. Chief, NPDES Permits and Engineering Secton

PG:cgl

Enclosure

c: DNR Northeast Regional Office City Clerk

## STATE OF MISSOURI

## DEPARTMENT OF NATURAL RESOURCES

#### MISSOURI CLEAN WATER COMMISSION



# MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92<sup>nd</sup> Congress) as amended,

1126	40
	1126

Owner: City of Columbia

Address: PO Box N, Columbia, MO 65202

Continuing Authority: Same as above Address: Same as above

Facility Name: Columbia Sanitary Landfill & Yard Waste Compost

Address: 5700 Peabody Road, Columbia, MO 65201

Legal Description: See page 2

Receiving Stream: Unnamed Tributary to Hinkson Creek (U)

First Classified Stream and ID: Hinkson Creek (C)(01008) 303(d) list

USGS Basin & Sub-watershed No.: (10300102-120001)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

## **FACILITY DESCRIPTION**

See page 2

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Poliutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

April 18, 2003 May 14, 2004

Effective Date Revised Stephen M. Manford, Directol Department of Natural Resources Executive Secretary, Clean Water Commission

April 17, 2008

Expiration Date

Jim Hull, Director of Staff, Clean Water Commission

#### FACILITY DESCRIPTION AND LEGAL DESCRIPTION (continued)

#### Outfall #001 - Deleted

Outfall #002 - Sanitary Landfill - SIC #4953 Settling basins. Design flow is 875,520 gallons per day. Actual flow is dependent upon precipitation. Legal Description: NE ¼, Sec. 22, T49N, R12W, Boone County

Outfall #003 - Sanitary Landfill - SIC #4953 Settling basins. Design flow is 665,280 gallons per day. Actual flow is dependent upon precipitation Legal Description: NE ¼, Sec. 22, T49N, R12W, Boone County

Outfall #004 - Sanitary Landfill - SIC #4953 Settling basins. Design flow is 2,720,160 gallons per day. Actual flow is dependent upon precipitation Legal Description: SE 1/4, Sec. 22, T49N, R12W, Boone County

Outfall #005 - Yard Waste Compost - SIC #4953 Settling basin. Design flow is 1,800,204 gallons per day. Actual flow is dependent upon precipitation. Legal Description: SW ¼, Sec. 22, T49N, R12W, Boone County

Outfall #006 - Non-Process Stormwater from Operations Center - SIC #4953 Settling Basin. Design flow is 2,052,721 gallons per day.

Actual flow is dependent upon precipitation.

Legal Description: SW 1/4, Sec. 22, T49N, R12W, Boone County

#### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PAGE NUMBER 3 of 6

once/year\*\*\*\*

grab

PERMIT NUMBER MO-0112640

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

infliced and monitored by the permittee as sp	podinca below.						
		FINAL EFFLUENT LIMITATIONS			MONITORING REQI	UIREMENTS	
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE	
Outfalls #002, #003 & #004							
Flow	MGD	*		*	inst once/quarter**	estimate	
Rainfall	inches	*		*	daily measuremer	nt ***	
BETX	mg/L	0.75		0.75	once/quarter**	grab	
Biochemical Oxygen Demand <sub>5</sub>	mg/L	60		45	once/quarter**	grab	
Chemical Oxygen Demand	mg/L	120		90	once/quarter**	grab	
Total Suspended Solids	mg/L	80		60	once/quarter**	grab	
Settleable Solids	mL/L/hr	1.5		1.0	once/quarter**	grab	
Total Dissolved Solids	mg/L	*		*	once/quarter**	grab	
Conductivity (Specific Conductance)	micromhos /cm 25°C	*		*	once/quarter**	grab	
Chloride Plus Sulfates	mg/L	1000		*	once/quarter**	grab	
Iron, Total Recoverable	mg/L	*		*	once/quarter**	grab	
PH - Units	SU	***		****	once/quarter**	grab	
MONITORING REPORTS SHALL BE SUBI	MITTED QUARTE	ERLY; THE F	RST REPOR	RT IS DUE <u>J</u>	uly 28, 2004.		
Calcium	mg/L	*		*	once/year*****	grab	
Fluoride	μg/L	*		*	once/year****	grab	
Total Hardness	μg/L	*		*	once/year****	grab	
Barium, Total Recoverable	μg/L	*		*	once/year****	grab	
Boron, Total Recoverable	μg/L	*		*	once/year****	grab	
Cadmium, Total Recoverable	μg/L	*		*	once/year*****	grab	
Chromium, Total Recoverable	μg/L	*		*	once/year*****	grab	
Cobalt, Total Recoverable	μg/L	*		*	once/year****	grab	
Copper, Total Recoverable	μg/L	*		*	once/year****	grab	
Galian Matal Bananalia	/T	<u>.</u>		<u>.</u>	/	1-	

MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE October 28, 2004. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

μg/L

#### **B. STANDARD CONDITIONS**

Sodium, Total Recoverable

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED  $\underline{\texttt{Part}}$  I STANDARD CONDITIONS DATED October 1, 1980, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

## A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

PAGE NUMBER 4 of 6

PERMIT NUMBER MO-0112640

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

		FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfalls #002, #003 & #004						
Ammonia as N	mg/L	****		****	once/year****	grab
Nitrate and Nitrite as N	mg/L	*		*	once/year****	grab
Phosphorus, Total Recoverable	mg/L	*		*	once/year****	grab
Mercury, Total Recoverable	μg/L	*		*	once/year****	grab
Arsenic, Total Recoverable	μg/L	*		*	once/year****	grab
Lead, Total Recoverable	μg/L	*		*	once/year****	grab
Selenium, Total Recoverable	μg/L	*		*	once/year****	grab
Silver, Total Recoverable	μg/L	*		*	once/year****	grab
Manganese, Total Recoverable	μg/L	*		*	once/year****	grab
Magnesium, Total Recoverable	μg/L	*		*	once/year****	grab
Zinc, Total Recoverable	μg/L	*		*	once/year****	grab
Antimony, Total Recoverable	μg/L	*		*	once/year****	grab
Beryllium, Total Recoverable	μg/L	*		*	once/year****	grab
Nickel, Total Recoverable	μg/L	*		*	once/year****	grab
Sulfate	mg/L	*		*	once/year****	grab
Thallium, Total Recoverable	μg/L	*		*	once/year****	grab
Total Organic Carbon	mg/L	*		*	once/year****	grab
Vanadium, Total Recoverable	μg/L	*		*	once/year****	grab
Oil and Grease	mg/L	15		10	once/year****	grab

MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE October 28, 2004. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

### **B. STANDARD CONDITIONS**

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED  $\underline{\texttt{Part}}$  STANDARD CONDITIONS DATED October 1, 1980, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

MO 780-0010 (8/91)

## A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

PAGE NUMBER 5 of 6
PERMIT NUMBER MO-0112640

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

		FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfall #005						
Flow	MGD	*		*	once/quarter**	24 hr. estimate
Biochemical Oxygen Demand <sub>5</sub>	mg/L	65		45	once/quarter**	grab
Total Suspended Solids	mg/L	110		70	once/quarter**	grab
pH - Units	SU	***		***	once/quarter**	grab
Rainfall	inches	*		*	once/quarter**	grab
Ammonia as N	mg/L	****		****	once/quarter**	grab
Nitrate as N	mg/L	****		****	once/quarter**	grab
Temperature	°centi grade	*		*	once/quarter**	grab
Outfall #006 Flow	MGD	*		*	once/year****	grab
Total Suspended Solids	mg/L	100		50	once/year****	grab
pH - Units	SU	***		***	once/year****	grab
Oil & Grease	mq/L	15		10	once/year****	grab

MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE October 28, 2004. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

#### **B. STANDARD CONDITIONS**

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED  $\underline{\texttt{Part}}$  I STANDARD CONDITIONS DATED  $\underline{\texttt{October}}$  1,  $\underline{\texttt{1980}}$ , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

MO 780-0010 (8/91)

#### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- \* Monitoring requirement only.
- \*\* Sample once per quarter in the months of January, April, July & October.
- \*\*\* Grab samples shall be collected during a rainfall event, when there is runoff from the landfill site. The sample shall be collected no later than one hour after runoff begins.
- \*\*\*\* pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.
- \*\*\*\*\* The discharge shall not exceed the appropriate values in Table B 10 CSR 20, 7.031.
- \*\*\*\*\* Samples to be taken in September.

#### C. SPECIAL CONDITIONS

- 1. Report as no-discharge when a discharge does not occur during the report period.
- All design and operating specifications and all Solid Waste Management Program
  approval conditions pertaining to water quality are hereby made a part of this permit
  and shall apply throughout the life of this permit without regard to other conditions,
  permits, occurrences, etc.
- 3. This permit may be reopened and modified, or alternatively revoked and reissued, to:
  - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
    - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
    - (2) controls any pollutant not limited in the permit.
    - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
    - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

- 4. This permit does not allow the discharge of storm water that has contacted the open face of the landfill. This permit does not allow the discharge of untreated leachate. All leachate shall be handled in accordance with the <u>Solid Waste Disposal Area Operating Permit, Report of Approval of Plans and Specifications</u> (with conditions).
- 5. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
  - (1) One hundred micrograms per liter (100 µg/L);
  - (2) Two hundred micrograms per liter (200  $\mu g/L$ ) for acrolein and acrylonitrile; five hundred micrograms per liter (500  $\mu g/L$ ) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1  $\mu g/L$ ) for antimony;
  - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
  - (4) The level established in Part A of the permit by the Director.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
- 6. All discharges shall comply with the Missouri Water Quality Standards, 10 CSR 20-7.031, Section (3)(C), which states "Waters shall be free from substance in sufficient amounts to cause unsightly color or turbidity...", and Section (4)(G), which states "Water contaminants shall not cause or contribute to turbidity or color that will cause substantial visible contact with the natural appearance of the stream...".
- 7. All activities performed to control erosion on the landfill site (seeding, mulching, terracing, etc.) shall be described and submitted along with the second quarter and fourth quarter Discharge Monitoring Reports. If no erosion controls are undertaken, indicate so on the reports.